



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,313	06/25/2008	David P. Prentice	W-391-02	2604
43840	7590	11/04/2010		
Waters Technologies Corporation 34 MAPLE STREET - LG MILFORD, MA 01757			EXAMINER THERKORN, ERNEST G	
			ART UNIT	PAPER NUMBER
			1776	
			MAIL DATE	DELIVERY MODE
			11/04/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,313	<b>Applicant(s)</b> PRENTICE ET AL.	
	<b>Examiner</b> Ernest G. Therkorn	<b>Art Unit</b> 1776	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) 6,7 and 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in reciting use of a housing with a heater. Schneider (U.S. Patent No. 5,238,557) (column 3, line 27, column 4, line 13) discloses that a column receiving piece, i.e., a housing, allows for temperature control of the column. Joshua (U.S. Patent No. 4,966,695) (column 6, lines 54-66) discloses that use of a container permits thermal control and facilitates inspection, repair, or replacement of the column. It would have been obvious to use a housing with a heater in Parkell (U.S. Patent No. 4,019,372) either because Schneider (U.S. Patent No. 5,238,557) (column 3, line 27, column 4, line 13) discloses that a column receiving piece, i.e., a housing, allows for temperature control of the column or because Joshua (U.S. Patent No. 4,966,695) (column 6, lines 54-66) discloses that use of a container permits thermal control and facilitates inspection, repair, or replacement of the column.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) as applied to claims 1, 2, and 9

Art Unit: 1776

above, and further in view of Kashima (U.S. Patent No. 5,083,158) and Kiang (U.S. Patent No. 4,732,672). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) in reciting use of a cradle. Kashima (U.S. Patent No. 5,083,158) (column 3, lines 35-38 and 58-61) discloses that it is desirable to have a cartridge located in a pivotable cover for replacement. Kiang (U.S. Patent No. 4,732,672) (column 2, lines 44-62) discloses that chromatography columns use quick mounting and demounting connectors. It would have been obvious to use a cradle in Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) because Kashima (U.S. Patent No. 5,083,158) (column 3, lines 35-38 and 58-61) discloses that it is desirable to have a cartridge located in a pivotable cover for replacement and because Kiang (U.S. Patent No. 4,732,672) (column 2, lines 44-62) discloses that chromatography columns use quick mounting and demounting connectors.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695), Kashima (U.S. Patent No. 5,083,158), and Kiang (U.S. Patent No. 4,732,672) as applied to claims 3-5 above, and further in view of Zelinka (U.S. Patent No. 4,484,061). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695), Kashima (U.S. Patent No. 5,083,158), and Kiang (U.S. Patent No. 4,732,672) in reciting use of an electrical circuit.

Art Unit: 1776

Zelinka (U.S. Patent No. 4,484,061) (Abstract) discloses use of electric heating elements allow a gradient over the length of the column. It would have been obvious to use an electric circuit in Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695), Kashima (U.S. Patent No. 5,083,158), and Kiang (U.S. Patent No. 4,732,672) because Zelinka (U.S. Patent No. 4,484,061) (Abstract) discloses use of electric heating elements allow a gradient over the length of the column.

Claims 8 and 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) as applied to claims 1, 2, and 9 above, and further in view of either Shalon (U.S. Patent No. 6,036,855) or Allington (U.S. Patent No. 6,294,088). At best, the claims differ from Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) in reciting use of a hinge. Shalon (U.S. Patent No. 6,036,855) (column 5, lines 6-35) discloses pivoting members allow a column to be positioned into place. Allington (U.S. Patent No. 6,294,088) (column 18, lines 49-52) discloses that use of a hinge permits pivoting. It would have been obvious to use a hinge in Parkell (U.S. Patent No. 4,019,372) in view of either Schneider (U.S. Patent No. 5,238,557) or Joshua (U.S. Patent No. 4,966,695) either because Shalon (U.S. Patent No. 6,036,855) (column 5, lines 6-35) discloses pivoting members allow a column to be positioned into place or because Allington (U.S. Patent No. 6,294,088) (column 18, lines 49-52) discloses that use of a hinge permits pivoting.

The remarks urge the claims are patentable over Parkell (U.S. Patent No. 4,019,372) based upon use of a housing with a heater. Schneider (U.S. Patent No. 5,238,557) (column 3, line 27, column 4, line 13) discloses that a column receiving piece, i.e., a housing, allows for temperature control of the column. Joshua (U.S. Patent No. 4,966,695) (column 6, lines 54-66) discloses that use of a container permits thermal control and facilitates inspection, repair, or replacement of the column. It would have been obvious to use a housing with a heater in Parkell (U.S. Patent No. 4,019,372) either because Schneider (U.S. Patent No. 5,238,557) (column 3, line 27, column 4, line 13) discloses that a column receiving piece, i.e., a housing, allows for temperature control of the column or because Joshua (U.S. Patent No. 4,966,695) (column 6, lines 54-66) discloses that use of a container permits thermal control and facilitates inspection, repair, or replacement of the column.

The remarks urge that Parkell (U.S. Patent No. 4,019,372) does not have a positioning means. However, Parkell (U.S. Patent No. 4,019,372)'s connecting means 14, which connects the outlet of column 12 to the detector 20 is considered to be a positioning means.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Art Unit: 1776

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernest G. Therkorn/  
**Ernest G. Therkorn**  
**Primary Examiner**  
**Art Unit 1797**

EGT  
November 3, 2010